

Fig. 1

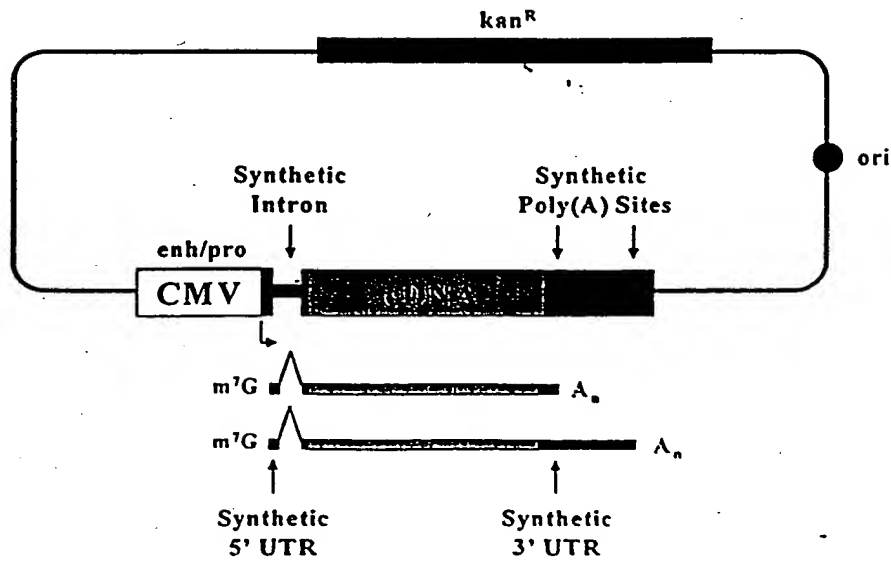


Fig. 2

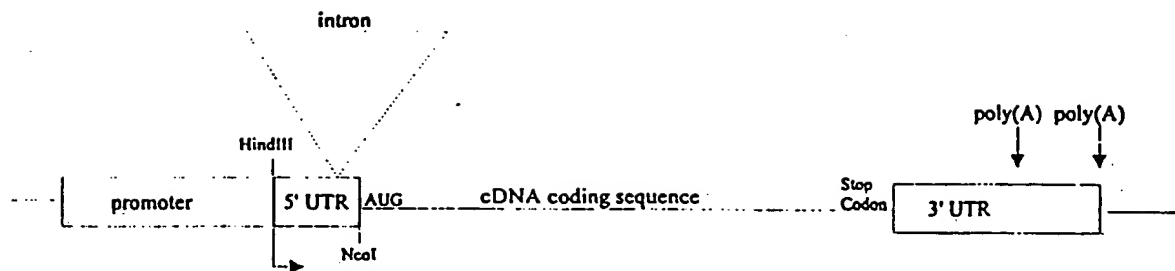


Fig. 3

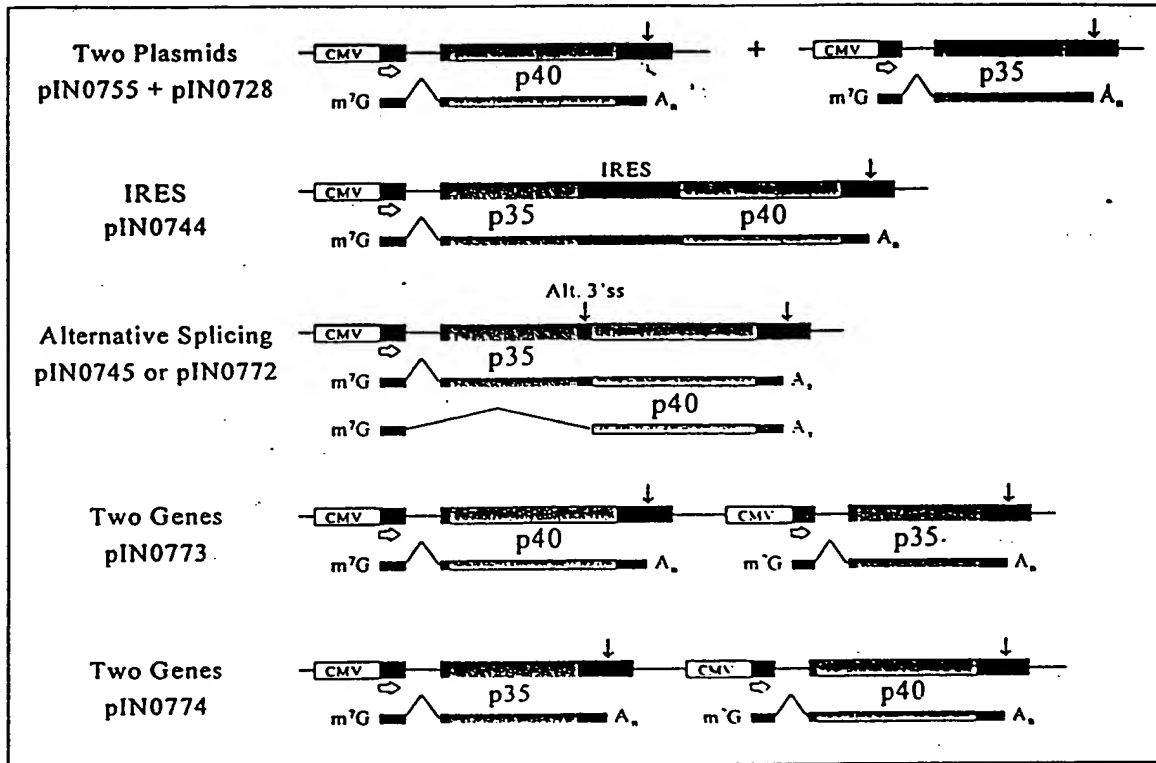


Fig. 4A

File : H40.AMI
 Range : 1 - 329
 Codon Table : Universal

SEQ ID NO. 1

Met	Cys	His	Gln	Gln	Leu	Val	Ile	Ser	Trp	Phe	Ser	Leu	Val	Phe	Leu	Ala	Ser	Pro	Leu
ATG	TGY	CAY	CAR	CAR	YTN	GTN	ATH	WSN	TGG	TTY	WSN	YTN	GTN	TTY	YTN	GCN	WSN	CCN	YTN
ATG	TGT	CAT	CAA	CAA	TTA	GTT	ATT	TCT	TGG	TTT	TCT	TTA	GTT	TTT	TTA	GCT	TCT	CCT	TTA
	TGC	CAC	CAG	CAG	TTG	GTC	ATC	TCC		TTC	TCC	TTG	GTC	TTT	TTG	GCC	TCC	CCC	TTG
					CTT	GTA	ATA	TCA		TCA	CTT	GTA			CTT	GCA	TCA	CCA	CTT
					CTC	GTG		TCG		TCG	CTC	GTG			CTC	GCG	TCG	CCG	CTC
					CTA			AGT		AGT	CTA				CTA	AGT		CTA	
					CTG			AGC		AGC	CTG				CTG	AGC		CTG	

Val	Ala	Ile	Trp	Glu	Leu	Lys	Lys	Asp	Val	Tyr	Val	Val	Glu	Leu	Asp	Trp	Tyr	Pro	Asp
GTN	GCN	ATH	TGG	GAR	YTN	AAR	AAR	GAY	GTN	TAY	GTN	GTN	GAR	YTN	GAY	TGG	TAY	CCN	GAY
GTT	GCT	ATT	TGG	GAA	TTA	AAA	AAA	GAT	GTT	TAT	GTT	GTT	GAA	TTA	GAT	TGG	TAT	CCT	GAT
GTC	GCC	ATC		GAG	TTG	AAG	AAG	GAC	GTC	TAC	GTC	GTC	GAG	TTG	GAC		TAC	CCC	GAC
GTA	GCA	ATA		CTT				GTA	GTA	GTA	GTA	GTA		CTT				CCA	
GTG	GCG			CTC				GTG	GTG	GTG	GTG	GTG		CTA				CCG	
				CTA										CTG					
				CTG															

Ala	Pro	Gly	Glu	Met	Val	Val	Leu	Thr	Cys	Asp	Thr	Pro	Glu	Glu	Asp	Gly	Ile	Thr	Trp
GCN	CCN	GGN	GAR	ATG	GTN	GTN	YTN	ACN	TGY	GAY	ACN	CCN	GAR	GAR	GAY	GGN	ATH	ACN	TGG
GCT	CCT	GGT	GAA	ATG	GTT	GTT	TTA	ACT	TGT	GAT	ACT	CCT	GAA	GAA	GAT	GGT	ATT	ACT	TGG
GCC	CCC	GGC	GAG		GTC	GTC	TTG	ACC	TGC	GAC	ACC	CCC	GAG	GAG	GAC	GGC	ATC	ACC	
GCA	CCA	GGA			GTA	GTA	CTT	ACA			ACA	CCA				GGA	ATA	ACA	
GCG	CCG	GGG			GTG	GTG	CTC	ACG			ACG	CCG				GGG		ACG	
					CTA														
					CTG														

Thr	Leu	Asp	Gln	Ser	Ser	Glu	Val	Leu	Gly	Ser	Gly	Lys	Thr	Leu	Thr	Ile	Gln	Val	Lys
ACN	YTN	GAY	CAR	WSN	WSN	GAR	GTN	YTN	GGN	WSN	GGN	AAR	ACN	YTN	ACN	ATH	CAR	GTN	AAR
ACT	TTA	GAT	CAA	TCT	TCT	GAA	GTT	TTA	GGT	TCT	GGT	AAA	ACT	TTA	ACT	ATT	CAA	GTT	AAA
ACC	TTG	GAC	CAG	TCC	TCC	GAG	GTC	TTG	GGC	TCC	GGC	AAG	ACC	TTG	ACC	ATC	CAG	GTC	AAG
ACA	CTT			TCA	TCA		GTA	CTT	GGA	TCA	GGA		ACA	CTT	ACA	ATA		GTA	
ACG	CTC			TCG	TCG		GTG	CTC	GGG	TCG	GGG		ACG	CTC	ACG			GTG	
	CTA			AGT	AGT			CTA		AGT				CTA					
	CTG			AGC	AGC			CTG		AGC				CTG					

Glu	Phe	Gly	Asp	Ala	Gly	Gln	Tyr	Thr	Cys	His	Lys	Gly	Gly	Glu	Val	Leu	Ser	His	Ser
GAR	TTY	GGN	GAY	GCN	GGN	CAR	TAY	ACN	TGY	CAY	AAR	GGN	GGN	GAR	GTN	YTN	WSN	CAY	WSN
GAA	TTT	GGT	GAT	GCT	GGT	CAA	TAT	ACT	TGT	CAT	AAA	GGT	GGT	GAA	GTT	TTA	TCT	CAT	TCT
GAG	TTC	GGC	GAC	GCC	GGC	CAG	TAC	ACC	TGC	CAC	AAG	GGC	GGC	GAG	GTC	TTG	TCC	CAC	TCC
		GGA		GCA	GGA			ACA				GGG	GGG		GTA	CTT	TCA		TCA
		GGG		GCG	GGG			ACG				GGG	GGG		GTG	CTC	TCG		TCG
																CTA	AGT		AGT
																CTG	AGC		AGC

Fig. 4B

110 120
 Leu Leu Leu Leu His Lys Lys Glu Asp Gly Ile Trp Ser Thr Asp Ile Leu Lys Asp Gln
 YTN YTN YTN YTN CAY AAR AAR GAR GAY GGN ATH TGG WSN ACN GAY ATH YTN AAR GAY CAR

 TTA TTA TTA TTA CAT AAA AAA GAA GAT GGT ATT TGG TCT ACT GAT ATT TTA AAA GAT CAA
 TTG TTG TTG TTG CAC AAG AAG GAG GAC GGC ATC TCC ACC GAC ATC TTG AAG GAC CAG
 CTT CTT CTT CTT GGA ATA TCA ACA ATA CTT
 CTC CTC CTC CTC GGG TCG ACG CTC
 CTA CTA CTA CTA AGT CTA
 CTG CTG CTG CTG AGC CTG

130 140
 Lys Glu Pro Lys Asn Lys Thr Phe Leu Arg Cys Glu Ala Lys Asn Tyr Ser Gly Arg Phe
 AAR GAR CCN AAR AAY AAR ACN TTY YTN MGN TGY GAR GCN AAR AAY TAY WSN GGN MGN TTY

 AAA GAA CCT AAA AAT AAA ACT TTT TTA CGT TGT GAA GCT AAA AAT TAT TCT GGT CGT TTT
 AAG GAG CCC AAG AAC AAG ACC TTC TTG CGC TGC GAG GCC AAG AAC TAC TCC GGC CGC TTC
 CCA ACA CTT CGA GCA TCA GGA CGA
 CCG ACG CTC CGG GCG TCG GGG CGG
 CTA AGA AGT AGA
 CTG AGG AGC AGG

150 160
 Thr Cys Trp Trp Leu Thr Thr Ile Ser Thr Asp Leu Thr Phe Ser Val Lys Ser Ser Arg
 ACN TGY TGG TGG YTN ACN ACN ATH WSN ACN GAY YTN ACN TTY WSN GTN AAR WSN WSN MGN

 ACT TGT TGG TGG TTA ACT ACT ATT TCT ACT GAT TTA ACT TTT TCT GTT AAA TCT TCT CGT
 ACC TGC TTG ACC ACC ATC TCC ACC GAC TTG ACC TTC TCC GTC AAG TCC TCC CGC
 ACA CTT ACA ACA ATA TCA ACA CTT ACA TCA GTA TCA TCA CGA
 ACG CTC ACG ACG TCG ACG CTC ACG TCG GTG TCG TCG CGG
 CTA AGT CTA AGT AGT AGT AGA
 CTG AGC CTG AGC AGC AGC AGG

170 180
 Gly Ser Ser Asp Pro Gln Gly Val Thr Cys Gly Ala Ala Thr Leu Ser Ala Glu Arg Val
 GGN WSN WSN GAY CCN CAR GGN GTN ACN TGY GGN GGN GGN ACN YTN WSN GCN GAR MGN GTN

 GGT TCT TCT GAT CCT CAA GGT GTT ACT TGT GGT GCT GCT ACT TTA TCT GCT GAA CGT GTT
 GGC TCC TCC GAC CCC CAG GGC GTC ACC TGC GGC GCC GCC ACC TTG TCC GCC GAG CGC GTC
 GGA TCA TCA CCA GGA GTA ACA TGA GCA GCA ACA CTT TCA GCA CGA GTA
 GGG TCG TCG CCG GGG GTG ACG GGG GCG GCG ACG CTC TCG GCG CGG GTG
 AGT AGT CTA AGT AGA
 AGC AGC CTG AGC AGG

190 200
 Arg Gly Asp Asn Lys Glu Tyr Glu Tyr Ser Val Glu Cys Gln Glu Asp Ser Ala Cys Pro
 MGN GGN GAY AAY AAR GAR TAY GAR TAY WSN GTN GAR TGY CAR GAR GAY WSN GCN TGY CCN

 CGT GGT GAT AAT AAA GAA TAT GAA TAT TCT TTT GAA TGT CAA GAA GAT TCT GCT TGT CCT
 CGC GGC GAC AAC AAG GAG TAT AG TAC TCT TCT GAG TCC CAG G GAC TCC GCC TGC CCC
 CGA GGA TCA GTA TCG GTG TCG GCG TCG GCG CCG
 AGA AGT AGT AGC
 AGG AGC AGC AGC

Fig. 4C

[illegible][illegible]

250																			260
Leu	Gln	Leu	Lys	Pro	Leu	Lys	Asn	Ser	Arg	Gln	Val	Glu	Val	Ser	Trp	Glu	Tyr	Pro	Asp
YTN	CAR	YTN	AAR	CCN	YTN	AAR	AAY	WSN	MGN	CAR	GTN	GAR	GTN	WSN	TGG	GAR	TAY	CCN	GAY
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TTA	CAA	TTA	AAA	CCT	TTA	AAA	AAT	TCT	CGT	CAA	GTT	GAA	GTT	TCT	TGG	GAA	TAT	CCT	GAT
TTG	CAG	TTG	AAG	CCC	TTG	AAG	AAC	TCC	CGC	CAG	GTC	GAG	GTC	TCC		GAG	TAC	CCC	GAC
CTT		CTT		CCA	CTT			TCA	CGA		GTA		GTA	TCA				CCA	
CTC		CTC		CCG	CTC			TCG	CGG		GTG		GTG	TCG				CCG	
CTA		CTA			CTA			AGT	AGA					AGT					
CTG		CTG			CTG			AGC	AGG					AGC					

Thr	Tyr	Ser	Thr	Pro	His	Ser	Tyr	Phe	Ser	Leu	Thr	Phe	Cys	Val	Gln	Val	Gln	Gly	Lys
ACN	TGG	WSN	ACN	CCN	CAY	WSN	TAY	TTY	WSN	YTN	ACN	TTY	TGY	GTN	CAR	GTN	CAR	GGN	AAR
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ACT	TGG	TCT	ACT	CCT	CAT	TCT	TAT	TTT	TCT	TTA	ACT	TTT	TGT	GTT	CAA	GTT	CAA	GGT	AAA
ACC		TCC	ACC	CCC	CAC	TCC	TAC	TTC	TCC	TTG	ACC	TTT	TGC	GTC	CAG	GTC	CAG	GGC	AAG
ACA		TCA	ACA	CCA		TCA			TCA	CTT	ACA			GTA		GTA		GGA	
ACG		TCG	ACG	CCG		TCG			TCG	CTC	ACG			GTG		GTG		GGG	
		AGT				AGT			AGT	CTA									
		AGC				AGC			AGC	CTG									

290																			300
Ser	Lys	Arg	Glu	Lys	Lys	Asp	Arg	Val	Phe	Thr	Asp	Lys	Thr	Ser	Ala	Thr	Val	Ile	Cys
WSN	AAR	MGN	GAR	AAR	AAR	GAY	MGN	GTN	TTY	ACN	GAY	AAR	ACN	WSN	GCN	ACN	GTN	ATH	TGY
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TCT	AAA	CGT	GAA	AAA	AAA	GAT	CGT	GTT	TTT	ACT	GAT	AAA	ACT	TCT	GCT	ACT	GTT	ATT	TGT
TCC	AAG	CGC	GAG	AAG	AAG	GAC	CGC	GTC	TTC	ACC	GAC	AAG	ACC	TCC	GCC	ACC	GTC	ATC	TGC
TCA		CGA					CGA	GTA		ACA			ACA	TCA	GCA	ACA	GTA	ATA	
TCG		CGG					CGG	GTG		ACG			ACG	TCG	GCG	ACG	GTG		
AGT		AGA					AGA							AGT					
AGC		AGG					AGG							AGC					

Fig. 4D

310

Arg	Lys	Asn	Ala	Ser	Ile	Ser	Val	Arg	Ala	Gln	Asp	Arg	Tyr	Tyr	Ser	Ser	Ser	Trp	Ser
MGN	AAR	AAY	GCN	WSN	ATH	WSN	GTN	MGN	GCN	CAR	GAY	MGN	TAY	TAY	WSN	WSN	WSN	TGG	WSN
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CGT	AAA	AAT	GCT	TCT	ATT	TCT	GTT	CGT	GCT	CAA	GAT	CGT	TAT	TAT	TCT	TCT	TCT	TGG	TCT
CGC	AAG	AAC	GCC	TCC	ATC	TCC	GTC	CGC	GCC	CAG	GAC	CGC	TAC	TAC	TCC	TCC	TCC		TCC
CGA			GCA	TCA	ATA	TCA	GTA	CGA	GCA			CGA			TCA	TCA	TCA		TCA
CGG			GCG	TCG		TCG	GTG	CGG	GCG			CGG			TCG	TCG	TCG		TCG
AGA				AGT		AGT		AGA				AGA			AGT	AGT	AGT		AGT
AGG				AGC		AGC		AGG				AGG			AGC	AGC	AGC		AGC

Glu	Trp	Ala	Ser	Val	Pro	Cys	Ser	***
GAR	TGG	GCN	WSN	GTN	CCN	TGY	WSN	TRR
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GAA	TGG	GCT	TCT	GTT	CCT	TGT	TCT	TAA
GAG		GCC	TCC	GTC	CCC	TGE	TCC	TAG
		GCA	TCA	GTA	CCA		TCA	TGA
		GCG	TCG	GTG	CCG		TCG	
			AGT				AGT	
			AGC				AGC	

Fig. 5A

File : H35.AMI
 Range : 1 - 220
 Codon Table : Universal

SEQ ID NO. 5

									10										20
Met	Cys	Pro	Ala	Arg	Ser	Leu	Leu	Leu	Val	Ala	Thr	Leu	Val	Leu	Leu	Asp	His	Leu	Ser
ATG	TGY	CCN	GCN	MGN	WSN	YTN	YTN	YTN	GTN	GCN	ACN	YTN	GTN	YTN	YTN	GAY	CAY	YTN	WSN
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ATG	TGT	CCT	GCT	CGT	TCT	TTA	TTA	TTA	GTT	GCT	ACT	TTA	GTT	TTA	TTA	GAT	CAT	TTA	TCT
	TGC	CCC	GCC	CGC	TCC	TTG	TTG	TTG	GTC	GCC	ACC	TTG	GTC	TTG	TTG	GAC	CAC	TTG	TCC
		CCA	GCA	CGA	TCA	CTT	CTT	CTT	GTA	GCA	ACA	CTT	GTA	CTT	CTT			CTT	TCA
		CCG	GCG	CGG	TCG	CTC	CTC	CTC	GTG	GCG	ACG	CTC	GTG	CTC	CTC			CTC	TCG
				AGA	AGT	CTA	CTA	CTA				CTA		CTA	CTA			CTA	AGT
				AGG	AGC	CTG	CTG	CTG				CTG		CTG	CTG			CTG	AGC

									30										40
Leu	Ala	Arg	Asn	Leu	Pro	Val	Ala	Thr	Pro	Asp	Pro	Gly	Met	Phe	Pro	Cys	Leu	His	His
YTN	GCN	MGN	AAV	YTN	CCN	GTN	GCN	ACN	CCN	GAY	CCN	GCN	ATG	TTY	CCN	TGY	YTN	CAY	CAY
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TTA	GCT	CGT	AAT	TTA	CCT	GTT	GCT	ACT	CCT	GAT	CCT	GGT	ATG	TTT	CCT	TGT	TTA	CAT	CAT
TTG	GCC	CGC	AAC	TTG	CCC	GTC	GCC	ACC	CCC	GAC	CCC	GGC		TTC	CCC	TGC	TTG	CAC	CAC
CTT	GCA	CGA		CTT	CCA	GTA	GCA	ACA	CCA		CCA	GGA			CCA		CTT		
CTC	GCG	CGG		CTC	CCG	GTG	GCG	ACG	CCG		CCG	GCG			CCG		CTC		
CTA		AGA		CTA													CTA		
CTG		AGG		CTG													CTG		

									50										60
Ser	Gln	Asn	Leu	Leu	Arg	Ala	Val	Ser	Asn	Met	Leu	Gln	Lys	Ala	Arg	Gln	Thr	Leu	Glu
WSN	CAR	AAV	YTN	YTN	MGN	GCN	GTN	WSN	AAV	ATG	YTN	CAR	AAR	GCN	MGN	CAR	ACN	YTN	GAR
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TCT	CAA	AAT	TTA	TTA	CGT	GCT	GTT	TCT	AAT	ATG	TTA	CAA	AAA	GCT	CGT	CAA	ACT	TTA	GAA
TCC	CAG	AAC	TTG	TTG	CGC	GCC	GTC	TCC	AAC		TTG	CAG	AAG	GCC	CGC	CAG	ACC	TTG	GAG
TCA			CTT	CTT	CGA	GCA	GTA	TCA			CTT			GCA	CGA		ACA	CTT	
TCG			CTC	CTC	CGG	GCG	GTG	TCG			CTC			GCG	CGG		ACG	CTC	
AGT			CTA	CTA	AGA			AGT			CTA				AGA		CTA		
AGC			CTG	CTG	AGG			AGC			CTG				AGG		CTG		

									70										80
Phe	Tyr	Pro	Cys	Thr	Ser	Glu	Glu	Ile	Asp	His	Glu	Asp	Ile	Thr	Lys	Asp	Lys	Thr	Ser
TTY	TAY	CCN	TGY	ACN	WSN	GAR	GAR	ATH	GAY	CAY	GAR	GAY	ATH	ACN	AAR	GAY	AAR	ACN	WSN
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TTT	TAT	CCT	TGT	ACT	TCT	GAA	GAA	ATT	GAT	CAT	GAA	GAT	ATT	ACT	AAA	GAT	AAA	ACT	TCT
TTC	TAC	CCC	TGC	ACC	TCC	GAG	GAG	ATC	GAC	CAC	GAG	GAC	ATC	ACC	AAG	GAC	AAG	ACC	TCC
		CCA		ACA	TCA			ATA					ATA	ACA				ACA	TCA
		CCG		ACG	TCG									ACG				ACG	TCG
					AGT													AGT	
					AGC													AGC	

									90										100
Thr	Val	Glu	Ala	Cys	Leu	Pro	Leu	Glu	Leu	Thr	Lys	Asn	Glu	Ser	Cys	Leu	Asn	Ser	Arg
ACN	GTN	GAR	GCN	TGY	YTN	CCN	YTN	GAR	YTN	ACN	AAR	AAV	GAR	WSN	TGY	YTN	AAV	WSN	MGN
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ACT	GTT	GAA	GCT	TGT	TTA	CCT	TTA	GAA	TTA	ACT	AAA	AAT	GAA	TCT	TGT	TTA	AAT	TCT	CGT
ACC	GTC	GAG	GCC	TGC	TTG	CCC	TTG	GAG	TTG	ACC	AAG	AAC	GAG	TCC	TGC	TTG	AAC	TCC	CGC
ACA	GTA		GCA		CTT	CCA	CTT		CTT	ACA				TCA		CTT		TCA	CGA
ACG	GTG		GCG		CTC	CCC	TC		CTC	ACG						CTC		TCG	CGG
					CTA		CTA		CTA					AGT		CTA		AGT	AGA
					CTG		CTG		CTG					AGC		CTG		AGC	AGG

Fig. 5B

110																		120	
Glu	Thr	Ser	Phe	Ile	Thr	Asn	Gly	Ser	Cys	Leu	Ala	Ser	Arg	Lys	Thr	Ser	Phe	Met	Met
GAR	ACN	WSN	TTY	ATH	ACN	AAY	GGN	WSN	TGY	YTN	GCN	WSN	MGN	AAR	ACN	WSN	TTY	ATG	ATG
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GAA	ACT	TCT	TTT	ATT	ACT	AAT	GGT	TCT	TGT	TTA	GCT	TCT	CGT	AAA	ACT	TCT	TTT	ATG	ATG
GAG	ACC	TCC	TTT	ATC	ACC	AAC	GGC	TCC	TGC	TTG	GCC	TCC	CGC	AAG	ACC	TCC	TTT	---	---
	ACA	TCA		ATA	ACA		GGA	TCA		CTT	GCA	TCA	CGA		ACA	TCA		---	---
	ACG	TCG			ACG		GGG	TCG		CTC	GCG	TCG	CGG		ACG	TCG		---	---
		AGT						AGT		CTA		AGT	AGA			AGT		---	---
		AGC						AGC		CTG		AGC	AGG			AGC		---	---
130																		140	
Ala	Leu	Cys	Leu	Ser	Ser	Ile	Tyr	Glu	Asp	Leu	Lys	Met	Tyr	Gln	Val	Glu	Phe	Lys	Thr
GCN	YTN	TGY	YTN	WSN	WSN	ATH	TAY	GAR	GAY	YTN	AAR	ATG	TAY	CAR	GTN	GAR	TTY	AAR	ACN
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GCT	TTA	TGT	TTA	TCT	TCT	ATT	TAT	GAA	GAT	TTA	AAA	ATG	TAT	CAA	GTT	GAA	TTT	AAA	ACT
GCC	TTG	TGC	TTG	TCC	TCC	ATC	TAC	GAG	GAC	TTG	AAG		TAC	CAG	GTC	GAG	TTC	AAG	ACC
GCA	CTT		CTT	TCA	TCA	ATA				CTT					GTA			ACA	---
GCG	CTC		CTC	TCG	TCG					CTC					GTG			ACG	---
	CTA		CTA	AGT	AGT					CTA								---	---
	CTG		CTG	AGC	AGC					CTG								---	---
150																		160	
Met	Asn	Ala	Lys	Leu	Leu	Met	Asp	Pro	Lys	Arg	Gln	Ile	Phe	Leu	Asp	Gln	Asn	Met	Leu
ATG	AAY	GCN	AAR	YTN	YTN	ATG	GAY	CCN	AAR	MGN	CAR	ATH	TTY	YTN	GAY	CAR	AAY	ATG	YTN
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ATG	AAT	GCT	AAA	TTA	TTA	ATG	GAT	CCT	AAA	CGT	CAA	ATT	TTT	TTA	GAT	CAA	AAT	ATG	TTA
	AAC	GCC	AAG	TTG	TTG		GAC	CCC	AAG	CGC	CAG	ATC	TTC	TTG	GAC	CAG	AAC		TTG
		GCA		CTT	CTT			CCA		CGA		ATA		CTT					CTT
		GCG		CTC	CTC			CCG		CGG				CTC					CTC
				CTA	CTA					AGA				CTA					CTA
				CTG	CTG					AGG				CTG					CTG
170																		180	
Ala	Val	Ile	Asp	Glu	Leu	Met	Gln	Ala	Leu	Asn	Phe	Asn	Ser	Glu	Thr	Val	Pro	Gln	Lys
GCN	GTN	ATH	GAY	GAR	YTN	ATG	CAR	GCN	YTN	AAY	TTY	AAY	WSN	GAR	ACN	GTN	CCN	CAR	AAR
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GCT	GTT	ATT	GAT	GAA	TTA	ATG	CAA	GCT	TTA	AAT	TTT	AAT	TCT	GAA	ACT	GTT	CCT	CAA	AAA
GCC	GTC	ATC	GAC	GAG	TTG		CAG	GCC	TTG	AAC	TTC	AAC	TCC	GAG	ACC	GTC	CCC	CAG	AAG
GCA	GTA	ATA			CTT			GCA	CTT				TCA		ACA	GTA	CCA		---
GCG	GTG				CTC			GCG	CTC				TCG		ACG	GTG	CCG		---
					CTA				CTA				AGT						---
					CTG				CTG				AGC						---
190																		200	
Ser	Ser	Leu	Glu	Glu	Pro	Asp	Phe	Tyr	Lys	Thr	Lys	Ile	Lys	Leu	Cys	Ile	Leu	Leu	His
WSN	WSN	YTN	GAR	GAR	CCN	GAY	TTY	TAY	AAR	ACN	AAR	ATH	AAR	YTN	TGY	ATH	YTN	YTN	CAY
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TCT	TCT	TTA	GAA	GAA	CCT	GAT	TTT	TAT	AAA	ACT	AAA	ATT	AAA	TTA	TGT	ATT	TTA	TTA	CAT
TCC	TCC	TTG	GAG	GAG	CCC	GAC	TC	TAC	AAG	ACC	ACC	ATC	AAG		TGC	ATC	TTG	TTG	CAC
TCA	TCA	CTT			CCA					ACA		ATA		CTT		ATA	CTT	CTT	---
TCG	TCG	CTC			CCG					ACG				CTC			CTC	CTC	---
AGT	AGT	CTA												CTA			CTA	CTA	---
AGC	AGC	CTG												CTG			CTG	CTG	---

Fig. 5C

														210															220
Ala	Phe	Arg	Ile	Arg	Ala	Val	Thr	Ile	Asp	Arg	Val	Thr	Ser	Tyr	Leu	Asn	Ala	Ser	***										
GCN	TTY	MGN	ATH	MGN	GCN	GTN	ACN	ATH	GAY	MGN	GTN	ACN	WSN	TAY	YTN	AAY	GCN	WSN	TRR										

GCT	TTT	CGT	ATT	CGT	GCT	GTT	ACT	ATT	GAT	CGT	GTT	ACT	TCT	TAT	TTA	AAT	GCT	TCT	TAA										
GCC	TTC	CGC	ATC	CGC	GCC	GTC	ACC	ATC	GAC	CGC	GTC	ACC	TCC	TAC	TTG	AAC	GCC	TCC	TAG										
GCA		CGA	ATA	CGA	GCA	GTA	ACA	ATA		CGA	GTA	ACA	TCA		CTT		GCA	TCA	TGA										
GCG		CGG		CGG	GCG	GTG	ACG			CGG	GTG	ACG	TCG		CTC		GCG	TCG											
		AGA		AGA						AGA			AGT		CTA			AGT											
		AGG		AGG						AGG			AGC		CTG			AGC											

Fig. 6

Codon Frequency Tables

human_high.cod

Codon usage for human (highly expressed) genes 1/14/91.

Amino Acid	Codon	Number	/1000	Fraction	..
Gly	GGC	903.00	18.76	0.24	
Gly	GGA	525.00	10.88	0.14	
Gly	GGT	441.00	9.14	0.12	
Gly	GCG	1867.00	38.70	0.50	
Glu	GAG	2429.00	50.18	0.75	
Glu	GAA	792.00	16.42	0.25	
Asp	GAT	592.00	12.27	0.25	
Asp	GAC	1021.00	21.23	0.75	
Val	GTC	1866.00	38.68	0.64	
Val	GTA	134.00	2.78	0.05	
Val	GTT	198.00	4.10	0.07	
Val	GTG	726.00	15.09	0.25	
Ala	GCC	652.00	13.51	0.17	
Ala	GCA	886.00	18.32	0.23	
Ala	GCT	634.00	13.36	0.17	
Ala	GCG	2057.00	42.64	0.53	
Arg	AGC	512.00	10.61	0.18	
Arg	AGA	294.00	6.18	0.10	
Ser	AGT	354.00	7.34	0.10	
Ser	AGC	1171.00	24.27	0.34	
Lys	AAC	2117.00	43.88	0.82	
Lys	AAA	471.00	9.76	0.18	
Asn	AAT	314.00	6.51	0.22	
Asn	AAC	1120.00	23.22	0.78	
Met	ATC	1077.00	22.32	1.00	
Ile	ATA	88.00	1.82	0.05	
Ile	ATT	315.00	6.53	0.20	
Ile	ATC	1368.00	28.38	0.77	
Thr	ACC	405.00	8.40	0.15	
Thr	ACA	273.00	5.73	0.14	
Thr	ACT	356.00	7.42	0.14	
Thr	ACC	1502.00	31.13	0.57	
Trp	TGC	652.00	13.51	1.00	
Leu	TCA	109.00	2.26	0.55	
Cys	TGT	325.00	6.74	0.32	
Cys	TGC	706.00	14.63	0.64	
End	TAC	42.00	0.87	0.21	
End	TAA	46.00	0.95	0.23	
Tyr	TAT	360.00	7.46	0.26	
Tyr	TAC	1042.00	21.60	0.74	
Leu	TTG	313.00	6.49	0.06	
Leu	TTA	76.00	1.58	0.02	
Phe	TTT	336.00	6.96	0.20	
Phe	TTG	1377.00	28.54	0.80	
Ser	TCC	329.00	6.74	0.89	
Ser	TCA	165.00	3.42	0.95	
Ser	TCT	450.00	9.33	0.13	
Ser	TCC	958.00	19.86	0.28	
Arg	CGC	611.00	12.67	0.21	
Arg	CGA	183.00	3.79	0.06	
Arg	CGT	216.00	4.35	0.07	
Arg	CGC	1086.00	22.51	0.37	
Gln	CAC	2020.00	41.87	0.88	
Gln	CAA	283.00	5.87	0.12	
His	CAT	234.00	4.85	0.31	
His	CAC	870.00	18.03	0.79	
Leu	CTC	2884.00	59.78	0.54	
Leu	CTA	166.00	3.44	0.03	
Leu	CTT	238.00	4.93	0.05	
Leu	CTC	1276.00	26.45	0.26	
Pro	CCC	482.00	9.99	0.17	
Pro	CCA	456.00	9.43	0.16	
Pro	CGT	564.00	11.77	0.19	
Pro	CCC	1410.00	29.23	0.44	

Fig. 7

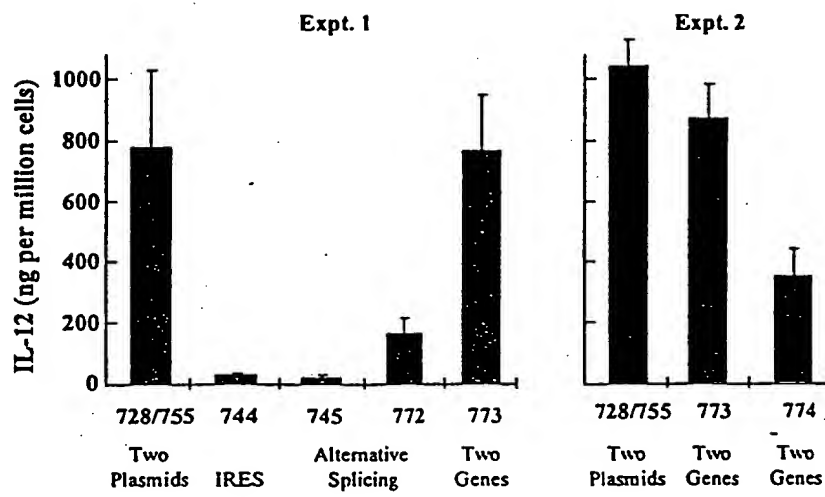


Fig. 8

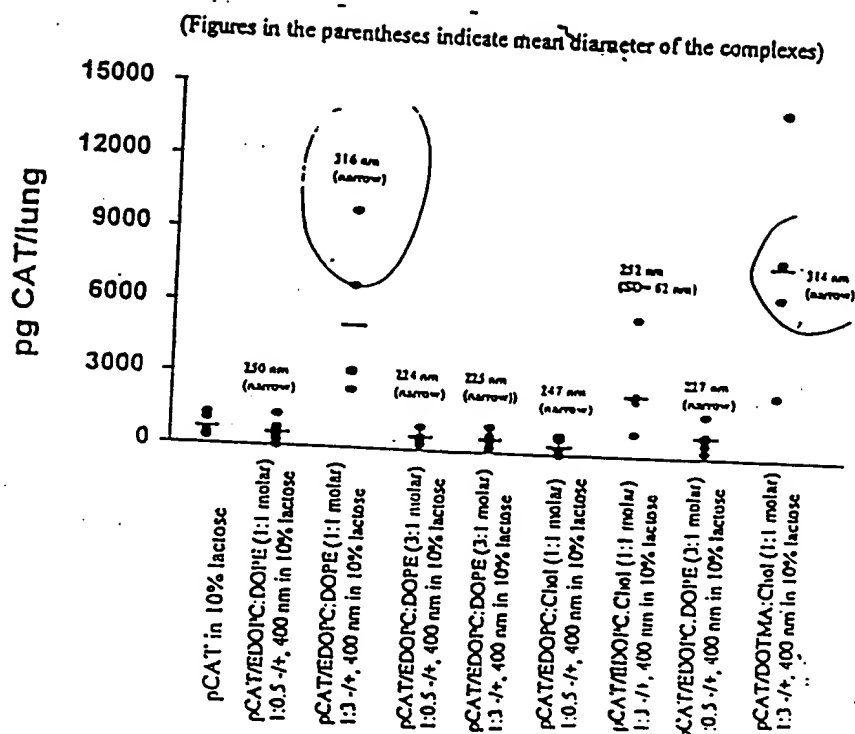
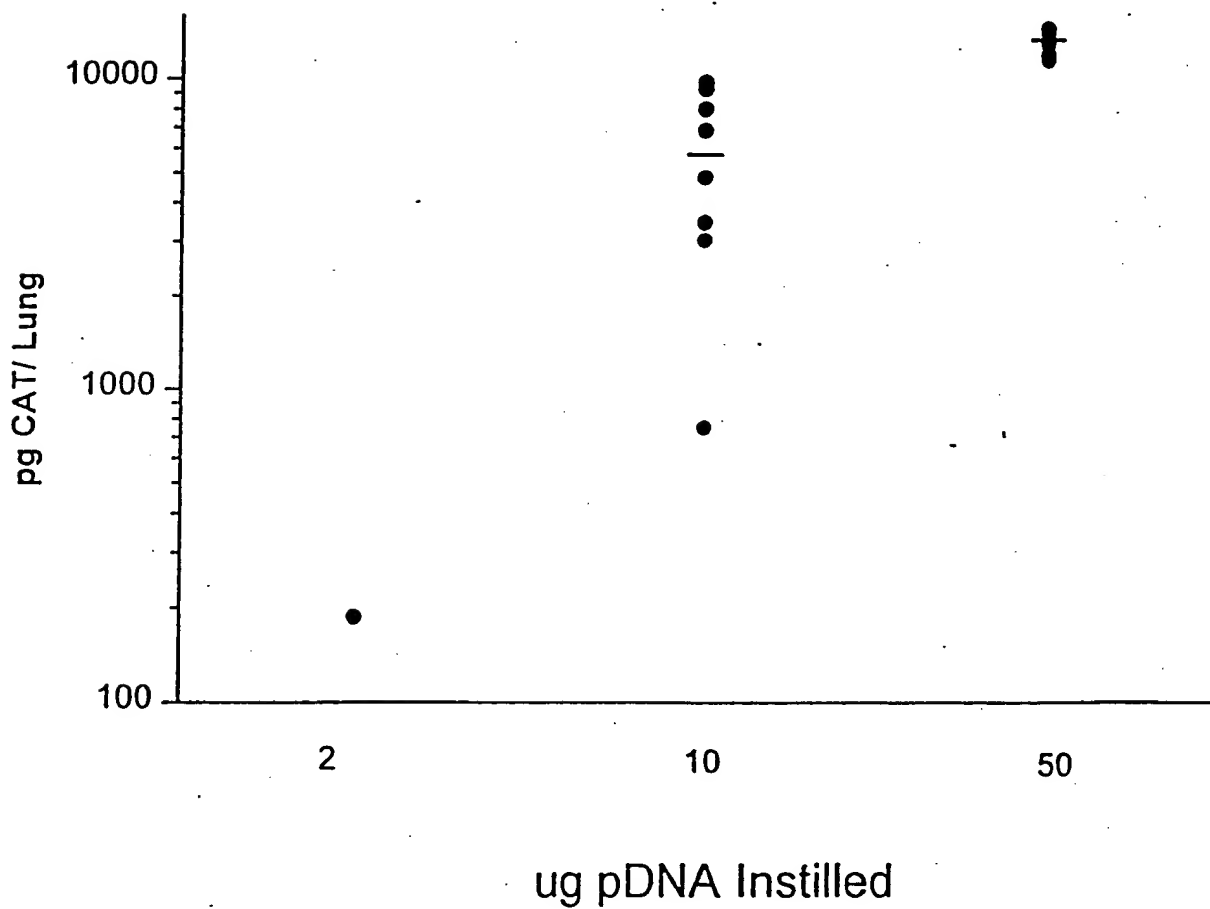


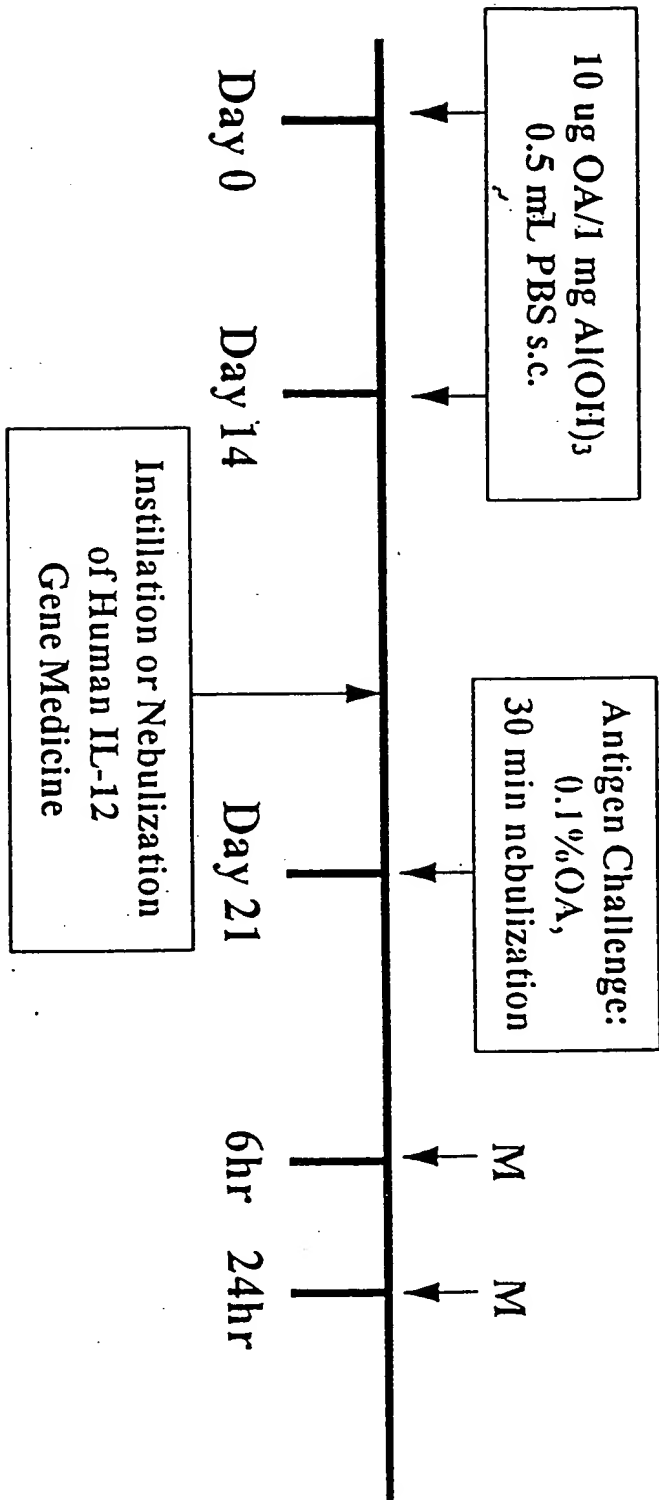
Fig. 9

(pCT0129.095:DOTMA/CHOL 1:3 +/- 10% Lactose)



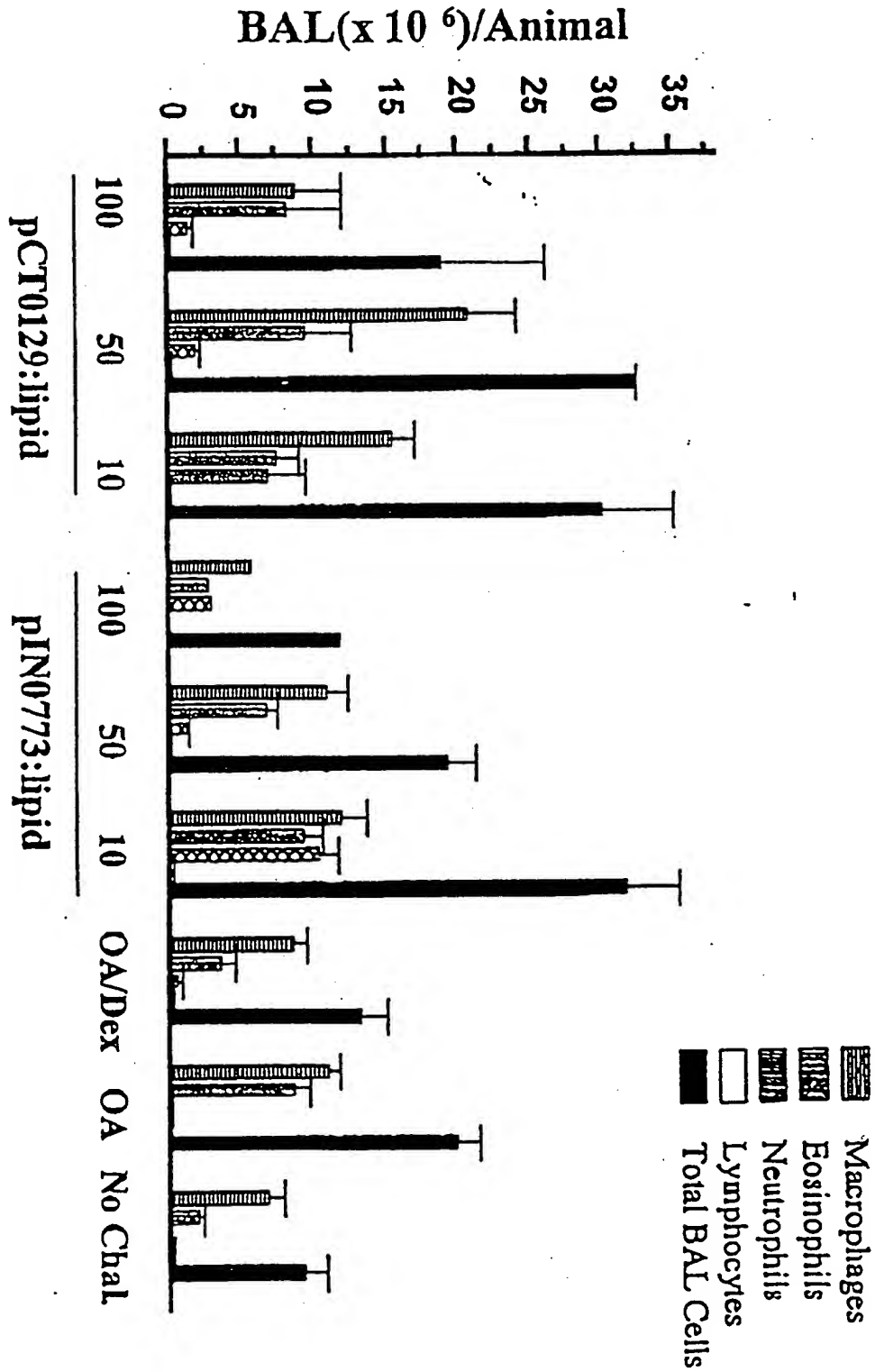
Antigen-Induced Airway Inflammation Model in Guinea Pigs

Fig. 10



M (measurement) = bronchoalveolar lavage total and differential cell count

Fig. 11



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